

REMARKS

This Amendment is filed in response to the Office Action dated June 4, 2007. For the following reasons this application should be allowed and the case passed to issue. No new matter is introduced by this Amendment. The amendments are supported throughout the specification and clarify the claims. For example claim 4 was amended to maintain consistency with paragraph [0013] of the specification, and claim 8 was amended to maintain consistency with paragraph [0015] of the specification.

Claims 1-8 are pending in this application. Claims 1-8 have been rejected. Claims 1, 2, 4, and 8 have been amended in this response.

Claim Rejections Under 35 U.S.C. § 103

Claims 1 – 8 were rejected under 35 U.S.C. § 103 (a) as unpatentable over Ikuta et al. (U.S. Patent Publication 2007/0072083 A1) or Kubota et al. (U.S. Pat. 5,654,114) in view of Yasui et al. (JP 2001-179151). This rejection is traversed, and reconsideration and withdrawal thereof respectfully requested. The following is a comparison between the present invention, as claimed, and the cited prior art.

An aspect of the invention, per claim 1, is a method for producing lithium ion secondary batteries, comprising the steps of preparing an electrode sheet with lead-forming parts and intermittently forming porous insulating layers comprising an inorganic oxide filler and a binder on a surface of the electrode sheet excluding the lead-forming parts. A lead is connected to each of the lead-forming parts and the batteries are fabricated by using the electrode sheet to which the leads are connected. The step of intermittently forming porous insulating layers comprises a step of applying a slurry comprising the inorganic oxide filler and the binder to the outer surface of a gravure roll, and transferring the slurry applied to the outer surface of

the gravure roll onto a surface of the electrode sheet that is being transported by a plurality of guide rolls, excluding the lead-forming parts; and a step of moving at least one selected from the gravure roll and the guide rolls to move the electrode sheet away from the gravure roll at the lead-forming parts.

The Examiner characterized each of the primary references Ikuta et al. and Kubota et al. as disclosing a process for producing lithium ion secondary batteries which comprises steps of preparing an electrode sheet with lead-forming parts, intermittently forming porous insulating layers comprising an inorganic oxide filler and a binder on a surface of the electrode sheet, excluding the lead forming parts, connecting leads to the lead forming parts, and fabricating a battery therefrom, wherein a gravure roll is utilized for forming the porous insulating layers. The Examiner characterized the secondary reference Yasui et al. as disclosing at paragraphs [0036] – [0040] forming porous insulating layers on electrode sheets by means of a gravure process wherein at least one of the gravure and guide rolls is moved away from the sheet at a lead forming part, and postulated that it would have been obvious to modify either Ikuta et al. and/or Kubota et al. according to the teaching of Yasui et al. to provide a method for producing lithium ion secondary batteries that includes using a gravure roll.

Initially, it is noted that the publication date of Ikuta et al. is later than the U.S. filing date of the instant application, therefore, it is not available as prior art. Furthermore, the instant application and Ikuta et al. were, at the time the instant invention was made, owned by the same person (Matsushita Electric Industrial Co., Ltd.) or subject to an obligation of assignment to the same person. Ergo, by virtue of 35 U.S.C. §103(c), Ikuta et al. may not be used as prior art.

The combination of Kubota et al. and Yasui et al. does not suggest the claimed method for producing lithium ion secondary batteries because Kubota et al. and Yasui et al., whether

taken alone, or in combination, do not suggest moving at least one selected from the gravure roll and the guide rolls to move the electrode sheet away from the gravure roll at the lead-forming part, as required by claim 1.

While Kubota et al. mention a gravure process as a method for applying an electrode material mixture to a current collector, the portion of the Kubota et al. referred to by the Examiner (col. 13, line 65 to col. 14, line 40), relates to the step of winding an electrode sheet obtained by applying the electrode material mixture to the current collector, and hence, is not related to the gravure process. Yasui et al. do not cure the deficiencies of Kubota et al. Contrary to the Examiner's characterization of paragraphs [0036] – [0040] of Yasui et al. as teaching moving at least one of the gravure and guide rolls away from the sheet at a lead forming part, the cited paragraphs, as well as the entire disclosure of Yasui et al., fail to suggest movement of at least one of the gravure and guide rolls away from the sheet at a lead forming part as recited in claim 1. In point of fact, paragraphs [0036] – [0040] of Yasui et al. merely teach that "the coating thickness of the coating agent to a base material 10 can be adjusted by changing the velocity of the peripheral velocity of the gravure roll 13 to the travel speed of a base material".

The present claims are further distinguishable because Yasui et al. pertain to improvements in a gravure process and a gravure coater. Yasui et al. intend to provide a gravure process and gravure coater capable of evenly applying a paint all over any type of thin substrate with good accuracy. Yasui et al. do not relate to battery technology, rather, Yasui et al. is directed to a technique of applying paint all over a substrate, and is silent about an intermittent coating technique as presently claimed.

Obviousness can be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do

so found either explicitly or implicitly in the references themselves or in the knowledge readily available to one of ordinary skill in the art. *In re Kotzab*, 217 F.3d 1365, 1370 55 USPQ2d 1313, 1317 (Fed. Cir. 2000); *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992); *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). There is no suggestion in either Kubota et al. or Yasui et al. to move at least one selected from the gravure roll and the guide rolls to move the electrode sheet away from the gravure roll at the lead-forming part, as required by claim 1.

The only teaching of the claimed method is found in Applicants' disclosure. However, the teaching or suggestion to make a claimed combination and the reasonable expectation of success must not be based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

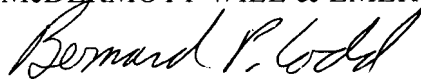
In view of the above amendments and remarks, Applicants submit that this application should be allowed and the case passed to issue. If there are any questions regarding this Amendment or the application in general, a telephone call to the undersigned would be appreciated to expedite the prosecution of the application.

Application No.: 10/550,149

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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